

SONOMA COUNTY

Site name: Del Mar Landing State Marine Park

Year established: 1972

Approximate Area: 0.06 nm²

Approximate Shoreline length: 0.6 nm

Approximate Depth range (feet): 0 to 42

Habitat types: Primarily rocky subtidal habitat

Surrounding habitat types: To the north, south, and offshore are rocky subtidal habitat, and some sandy areas.

Summary of existing regulations: Take of all living marine resources is prohibited except the recreational take of finfish by hook and line or spear.

Primary objectives: This area was originally designated as an ecological reserve. Fish and Game Code Section 1580 (ecological reserves) states that "the policy of the state is to protect threatened or endangered native plants, wildlife, or aquatic organisms or specialized habitat types, both terrestrial and non-marine aquatic, or large heterogeneous natural gene pools for the future use of mankind through the establishment of ecological reserves." Although the language does not specifically refer to ecological reserves in marine areas, the Fish and Game Commission has extended this policy to those areas.

Existing enforcement: Enforcement is difficult due to the remoteness of the area.

Baseline and ongoing monitoring and research studies: No baseline or ongoing monitoring or research has occurred or does occur.

Basic Evaluation: Thus far, very little study specific to the efficacy of this area as a marine protected area has been pursued.

Site name: Salt Point State Marine Conservation Area

Year established: 1970

Approximate Area: 1.24 nm²

Approximate Shoreline length: 3.5 nm

Approximate Depth range (feet): 0 - 222

Overlapping area: Gerstle Cove State Marine Conservation Area

Habitat types: The area contains exposed and sheltered coastline with mostly hard bottom, and includes numerous wash rocks and rock shelves interspersed with gravel/sandy bottom. The substrate is primarily Franciscan sandstone and shale parent rock.

Surrounding habitat types: The surrounding area contains primarily gravel/sandy bottom with rocky outcroppings.

Summary of existing regulations:

Only the following species may be taken recreationally: finfish, red abalone, chiones, clams, cockles, rock scallops, native oysters, crabs, lobsters, ghost shrimp, sea urchins, mussels and marine worms except that no worms may be taken in any mussel bed unless taken incidentally to the take of mussels.

Only the following species may be taken commercially: finfish, crabs, ghost shrimp, jackknife clams, sea urchins, algae (except giant kelp and bull kelp) and worms except that no worms may be taken in any mussel bed, nor may any person pick up, remove, detach from the substrate any other organisms, or break up, move or destroy any rocks or other substrate or surfaces to which organisms are attached.

Primary objectives: This site was originally designated as a State Park. State parks are designated to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora, and the most significant examples of such ecological regions (Public Resources Code 5019.53 and Title 14, Section 4752, CCR). The Department of Parks and Recreation's General Plan states "the primary purpose of Salt Point State Park is to preserve the outstanding scenic, scientific, natural, and cultural values found on the Sonoma Coast, including offshore areas..."

Existing enforcement: Long-term cooperative enforcement between State Park Rangers, State Fish and Game Wardens and Sonoma County Sheriff Deputies.

Baseline and ongoing monitoring and research studies: No quantitative studies have been conducted at Salt Point. The State Parks System Dive Team and the California Underwater Parks and Preserves Advisory Board have conducted numerous dives here starting in the late 1960s. Seltenrich and DeMartini (1979) reported on interpretation and management of Mendocino Headlands and Salt Point State Underwater Parks. They described the biota of various depths and physical environments. This report can be considered a qualitative baseline.

Basic Evaluation: Salt Point is a highly utilized recreational and commercial fishing area. Due to the number of people frequenting the area that are aware of the limited restrictions currently in place, the MPA functions to the extent of those regulations. Anecdotal references to increased numbers and size of individual species have varied from year to year, but in general speak to a positive effect relative to areas outside the MPA. Commercial Passenger Fishing Vessels commonly anchor in the MPA, shore-based anglers frequent the access points, and commercial urchin fishing activity also occurs in this

area. Rocky habitat, wash rocks and similar habitat lay both north and south of the current MPA boundaries.

Published references related to effectiveness of this MPA: 168

Published references related to use of this MPA as a research tool: 120, 121, 184, 212, 213

Site name: Gerstle Cove State Marine Conservation Area

Year established: 1971

Approximate Area: 0.01 nm² **Approximate Shoreline length:** 0.3 nm

Approximate Depth range (feet): 0 to 16

Overlapping area: Salt Point State Marine Conservation Area

Habitat types: Exposed wash rock, gravel/sandy bottom with rocky outcroppings.

Surrounding habitat types: Offshore rocks, rocky walls and boulders; gravel/sandy bottom locally dominant.

Summary of existing regulations: Take of all living marine resources is prohibited except the commercial take of finfish and algae (except giant kelp and bull kelp).

Primary objectives: Protection of an area representative of the ecological characteristics and aquatic organisms of the region.

Existing enforcement: Enforcement has been active in this area, but difficult. This is the major access point for multiple users of the surrounding stretch of coastline.

Baseline and ongoing monitoring and research studies:

The Department of Parks and Recreation conducts periodic resource evaluations.

Basic Evaluation: Anecdotal information suggests that current protection within the Gerstle Cove has enhanced and provided for increased abundance of individuals of a variety of species. Qualitative surveys conducted shortly after (3 years) the MPA was established indicated an increase in the abalone population within the MPA.

Unpublished references related to effectiveness of this MPA: 7

Site name: Fort Ross State Marine Conservation Area

Year established: 1970

Approximate Area: 0.17 nm² **Approximate Shoreline length:** 0.9 nm

Approximate Depth range (feet): 0 to 102

Habitat types: Exposed and sheltered coastline with mostly hard bottom; numerous wash rocks, rock shelves interspersed with gravel/sandy bottom. Franciscan sandstone and shale parent rock. Sandy bottom at 60 feet supports an unusual stand of eelgrass.

Surrounding habitat types: Sandy bottom with rocky outcroppings, offshore wash rocks.

Summary of existing regulations:

No recreational take of living or non-living marine resources is allowed except: finfish, red abalone, chiones, clams, cockles, rock scallops, native oysters, crabs, lobsters, ghost shrimp, sea urchins, mussels and marine worms except that no worms may be taken in any mussel bed unless taken incidentally to the take of mussels.

Commercial take of species other than giant kelp and bull kelp is allowed.

Primary objectives: This site was originally designated as a State Historic Park and State Underwater Park. State historic parks are established to preserve objects of historical, archaeological, and scientific interest, historic sites and places commemorating important persons or historic events (Public Resources Code 5019.59 and Title 14, Section 4751, CCR).

Existing enforcement: Long-term cooperative enforcement between State Park Rangers, State Fish and Game Wardens and Sonoma County Sheriff Deputies.

Baseline and ongoing monitoring and research studies: No quantitative studies have been conducted at Fort Ross. The State Parks System Dive Team and the California Underwater Parks and Preserves Advisory Board have conducted numerous dives here starting in the late 1960s. In 1981, the US Navy worked with the Department of Parks and Recreation (DPR) to document shipwreck sites using on board magnetometers; 14 sites were plotted. Navy and DPR divers recorded some sites with video cameras. These videos show the general biota of wreck sites. Marine scientists from Indiana University and the DPR have carefully documented this site over the last few years. Qualitative observations of the biota, video and still documentation is in progress.

Basic Evaluation: The primary objective in originally establishing this state historic park was the preservation of the various shipwreck sites in the area; preservation of these sites is achieved under the current status. The current regulations provide limited protection for the invertebrate species listed above, however this area does not function as a biological reserve. Fort Ross Cove is utilized regularly by Commercial Passenger Fishing Vessels. Two long-term diving rangers have reported substantial declines in rockfish populations over the past 20 years. Commercial urchin fishing currently occurs within the MPA boundaries, and could continue as it has had a positive effect on kelp establishment and overall biodiversity.

Published references related to use of this MPA as a research tool: 120, 183

Site name: Sonoma Coast State Marine Conservation Area

Year established: 1970

Approximate Area: 0.68 nm² **Approximate Shoreline length:** 4.2 nm

Approximate Depth range (feet): 0 to 26

Overlapping area: Bodega State Marine Reserve

Habitat types: Exposed coast with mostly hard bottom, rock shelves with gravel/sandy bottom interspersed.

Surrounding habitat types: Offshore wash rocks, rocky pinnacles and sandy bottom.

Summary of existing regulations:

No recreational take of living or non-living marine resources is allowed except: finfish, red abalone, chiones, clams, cockles crabs, ghost shrimp, mussels, native oysters, rock scallops, sea urchins and marine worms except that no worms may be taken in any mussel bed unless taken incidentally to the take of mussels.

Commercial take of species other than giant kelp and bull kelp is allowed.

Primary objectives: This site was originally designated a State beach. State beaches are designed in areas with frontage on the ocean or bays designed to provide swimming, boat, fishing, and other beach-oriented activities. (Public Resources Code 5019.56 and Title 14, Section 4753, CCR)

Existing enforcement: Long-term cooperative enforcement between State Park Rangers, State Fish and Game Wardens and Sonoma County Sheriff Deputies.

Baseline and ongoing monitoring and research studies: Many studies by UC Bodega Marine Laboratory, Sonoma State University and the College of Marin. A number of senior projects have been done along Sonoma Coast. Dr Gordon L. Chan, College of Marin, prepared a Marine Coastal Ecology Syllabus (1972) which focuses to the San Francisco Bay Region and useful as well for the Sonoma Coast.

Basic Evaluation: Maximum upwelling values for the west coast system consistently occur along the Sonoma and Mendocino coast. This seasonal process transports nutrient rich water from the deep ocean into the sunlit surface layers near shore. The Bodega Submarine Canyon heads in the southern part of Sonoma Coast State Marine Conservation Area and acts as a conduit of nutrient rich water. As upwelling occurs spring and summer, phytoplankton rich waters stimulates the growth of many organisms and produces a highly diverse and productive biota.

The primary objective in establishing this site, as stated above, was to provide for recreational activities, including fishing. The site fulfills this objective. However Sonoma Coast State Marine Conservation Area does not function as a marine protected area other than providing limited protection for invertebrate species. Commercial Passenger Fishing Vessels frequently utilize this area of coastline.

Site name: Bodega State Marine Reserve

Year established: 1965 (full protection established in 1999)

Approximate Area: 0.20 nm² **Approximate Shoreline length:** 1.0 nm

Approximate Depth range (feet): 0 to 36

Overlapping area: Sonoma Coast State Marine Conservation Area

Habitat types: Rocky outcrops in sandy bottom.

Surrounding habitat types: Exposed coastline, wash rocks, rocky bottom interspersed with sand.

Summary of existing regulations: All commercial and recreational take prohibited.

Primary objectives: Protection of marine plants and invertebrates.

Existing enforcement: Enforcement is effective because of the close proximity of the site to the Bodega Marine Laboratory.

Baseline and ongoing monitoring and research studies:

Bodega Marine Laboratory utilizes this MPA on a regular basis for research projects and observation.

Basic Evaluation: This MPA is relatively small and is the only existing MPA in the between Humboldt and Monterey counties which is entirely marine and which has complete protection for all marine organisms. Complete protection has only been afforded to this MPA, originally established as a Marine Life Refuge, since 1999, a relatively short time period in which to assess its function as a no-take MPA. However, several studies utilize the MPA as a comparative baseline for species protected from the effects of fishing (i.e., urchins, crab, and abalone). The current boundaries of the MPA are honored and generally accepted by users groups.

Published references related to effectiveness of this MPA: 14

Published references related to use of this MPA as a research tool: 13, 15, 114, 120, 121, 132, 133, 134, 150, 168, 169, 184, 211, 212, 213